

tators than the old game ever did. It is now played in most of the leading high schools of California. It is firmly and permanently established on the Pacific Coast, unless, as in the East, it is modified to suit the purposes of professional coaches. It seems to me that our experience in California should be worth something to our colleagues in the East.

Very truly yours,

DAVID STARR JORDAN

UNIVERSITY AND EDUCATIONAL NEWS

THE medical school of the University of Pennsylvania has been given \$100,000 by an unnamed alumnus to endow a chair to be known as "the Benjamin Rush professorship of physiological chemistry."

THE valuable library on mathematics and science of the late Oren Root, for many years professor of mathematics at Hamilton College, has been presented to the college by his son, Mr. Elihu Root.

THE dedication of three new engineering buildings at the University of Kansas occurred on February 25. The buildings are those provided for by the legislature of 1907, and are a general engineering building, housing the departments of civil and mechanical engineering and, as a temporary matter, the department of electrical engineering; a mining and geology building, and the mechanical laboratory and power plant. In the afternoon, at 2:30, addresses were given by Dean Frank O. Marvin, Dr. Richard C. Maclaurin, president of the Massachusetts Institute of Technology, and Mr. Ernest R. Buckley, president of the American Mining Congress. Following these were the dedication ceremonies, under the direction of Chancellor Frank Strong. In the evening a banquet was held at Robinson Gymnasium, with after-dinner speeches.

THE Dutch government has appropriated \$100,000 for a laboratory of physical and mineral chemistry at Groningen, where Professor F. M. Jaeger is head of the department.

DR. BERTRAM E. BOLTWOOD has been elected professor of radio-chemistry in the graduate school of Yale University.

PROFESSOR SEITARO GOTO has been called to the chair of zoology at the Tokyo Imperial University to succeed the late Professor Kakichi Mitsukuri. Naohide Yatsu, Ph.D. (Columbia), has been appointed assistant professor. Katashi Takahashi, Ph.D. (Chicago), has been appointed to the professorship of zoology at the First High School to fill the vacancy caused by the resignation of Professor Goto.

DISCUSSION AND CORRESPONDENCE

A SUBSTITUTE FOR CROSS WIRES IN THE SPECTROSCOPE

TO THE EDITOR OF SCIENCE: Should any of the readers of SCIENCE be in possession of spectrometers which are unprovided with cross wires, it may interest them to learn of a cheap method of supplying a substitute for such desirable articles, which has been found of service in this laboratory, and which, so far as the writer knows, has not hitherto been published.

The method consists in inserting, either in the ocular, or telescope tube, at the proper focal point, a thin glass disc on which is etched a cross with lines about as heavy as the wires in an ordinary cross wire eyepiece. This cross, when in focus, appears as perfectly opaque lines, which fully answer the purpose of cross wires.

These discs have been in use here for some time, and their working has been compared with that of the regular cross wire eyepieces without any difference between the two being noticed. In fact, the cross wires of one of our instruments being somewhat too heavy, we removed them, and substituted a ruled disc with manifest gain in ease of working. The glass disc does not seem to obscure any portion of the spectrum; all portions, both of emission and absorption spectra, having been observed therethrough with instruments of various powers, both prism and grating, without any appreciable loss of either brightness or definition.

For observing a bright line spectrum it is